

Application No.: 10/783107
Amendment dated: July 10, 2006
Reply to Office action of April 10, 2006

REMARKS/ARGUMENTS

Rejection in paragraph 4 (\$103(a))

At the time the present invention was made, the subject matter of the present application and the subject matter of Watanabe publication US 2003/0051848 (now Patent 6,716,318) were subject to an obligation of assignment to the same entity (Ichikawa Co., Ltd.). The foregoing statement is made to supplement the declaration of Mr. Yasuhiko Kobayashi submitted previously, and should overcome the section 103 rejection of claims 2 and 3 based on Watanabe in paragraph 4 of the final Office action, since Watanabe potentially qualifies as prior art only under \$102(e).

Rejection in paragraph 2 (\$102(e))

The applicants request reconsideration of the rejection, in paragraph 2, of claim 1 on Watanabe under \$102(e). This rejection is based on the assertion that Watanabe implicitly teaches that using unoriented films in a press felt is "less preferred, but known."

Watanabe states that a "biaxially oriented film is suitable for use as a rewetting prevention layer" (paragraph 0035), and that, "when a biaxially oriented film is used . . . the rewetting prevention layer 40 and the opening rim 42. . . may be prevented from being split. . ." (paragraph 0049). We agree with the Examiner that these two statements in Watanabe express a preference for a biaxially oriented film. However, the statements do not say anything about what the alternatives might be. Even if one concludes from the reference to prevention of "film rupture" in paragraph 0049, that the

Application No.: 10/783107
Amendment dated: July 10, 2006
Reply to Office action of April 10, 2006

alternative is also a film, an unoriented film is not the only alternative to a biaxially oriented film. A uniaxial orientation is also possible. Thus, there is insufficient basis for a conclusion that Watanabe supplies the identical disclosure required for an anticipation rejection under section 102. The rejection necessarily incorporates a conclusion that the claimed invention was "obvious," and is precluded by the showing, under 35 U.S.C. §103(c), that the invention and the subject matter of Watanabe were commonly owned.

The Examiner has also taken the position that Watanabe's claims (the claims of the pre-grant publication) disclose unoriented and uniaxially oriented films because they refer to films generally without qualification as to orientation or lack thereof. The Examiner's position, therefore, appears to be that, because Watanabe's claims are not limited by film orientation, Watanabe discloses a genus, namely a press felt having a film with three-dimensional openings, and that the disclosure of the genus amounts to a disclosure of each of the species within the genus. Since a patent claim is entitled to be as broad as the prior art will permit, it does not follow logically from the fact that Watanabe's claims are not limited to a particular film orientation, that Watanabe's patent discloses a press felt containing an unoriented film.

Rejection in paragraphs 5-7 (§103(a))

The rejection of claims 1-2 and 5-8 in paragraphs 5-7 is a rejection under §103(a), based on Eklund and WO 03/029558. Claim 1 recites that the "anti-rewetting layer" is "disposed within the batt and spaced from the wet paper web contacting

Application No.: 10/783107
Amendment dated: July 10, 2006
Reply to Office action of April 10, 2006

surface." The Examiner, acknowledging that Eklund does not disclose that the rewetting prevention layer is disposed within the batt layer, asserts that it would have been obvious to have situated the anti-rewetting layer of Eklund within the batt in order to avoid having the film layer interfere with the papermaking process as taught by WO 03/029558. At page 7, lines 15-17, WO 03/029558 explains that ". . . perforated film layer 36 should always be kept away from the paper web 12 so as to not adversely affect the paper forming process."

Eklund has a reason for placing the laser-perforated layer on the outside, namely, to achieve high paper quality by making the side of the press felt facing the paper web as even and finely porous as possible (Eklund, col. 1, line 66 -col. 2, line 1). To apply the teachings of WO 03/029558 (keeping the perforated film layer away from the paper web) would render Eklund's sheet unsuitable for Eklund's purpose. Thus the modification of Eklund's material, following the teachings of WO 03/029558, cannot be considered to have been obvious.

Although the Examiner has not asserted that it would have been obvious to modify WO 03/029558 in view of Eklund, it may be noted that there is no teaching in Eklund of the function of the special hole configurations such as that in Eklund's FIGs. 6-8. There is no suggestion that the tapered configuration of Eklund's FIG. 7, for example, exhibits superior rewetting prevention. Indeed, if it did, one might question why Eklund also shows an oppositely tapered funnel in FIG. 8. Since Eklund's perforated sheet is on the paper web contacting side, one might assume that the special hole configurations have something to do with the quality of the paper being produced. But, there is nothing in Eklund that

Application No.: 10/783107
Amendment dated: July 10, 2006
Reply to Office action of April 10, 2006

would motivate a person of ordinary skill in the art to utilize a film having special hole configurations such as shown in Eklund's FIGs. 6-8, in an internally disposed layer as in WO 03/029558.

Concerning claims 5-6, in paragraph 7, the Examiner asserts that Eklund teaches that the openings can have any configuration, and concludes that it would have been obvious to provide flat openings in addition to three-dimensional openings. Although the cited description at col. 3, lines 39-56, does not suggest combining different kinds of holes in the same film, Eklund's col. 6, lines 39-41 appears to suggest the possibility of different hole configurations in different parts of the foil. What Eklund does not teach, however, is combining flat openings with three-dimensional openings. As explained in paragraph 0034 of the Applicant's specification,

"the openings formed by the needles have walls 42, which protrude toward one side of the layer 40. In the case of FIG. 3, the wall 42 protrudes downward. Thus, the opening 44 has a three dimensional structure, comprising a wall 42, a wet paper web side end 42a and the roll side end 42b."

The above paragraph effectively defines the "three dimensional" structure as comprising a portion of the film that protrudes out of the surface of the film. Eklund shows no such structure. Furthermore, no matter which of Eklund's hole configurations are combined, in no case would there be "flat openings in addition to . . . openings having a three-dimensional structure" as defined in claims 5 and 6.

Application No.: 10/783107
Amendment dated: July 10, 2006
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Rejection in paragraph 8 (\$103(a))

The rejection in paragraph 8 is a rejection of claims 3 and 4 on Eklund, WO 03/029558 and Gulya et al, Gulya being relied upon for a teaching of nylon as a rewetting preventing layer. In both Eklund and in Gulya, the layer having openings is an outside layer on the web-contacting side of the press felt. (See Gulya, col. 3, lines 42-46.) The same reasons as set forth above in response to the rejection in paragraphs 5-7 apply to the rejection in paragraph 8.

Rejection in paragraph 9 (\$103(a))

The rejection of claims 9-10 in paragraph 9 of the Office action is based on Schiel in view of WO 03/029558. The examiner refers to FIG. 4 in Schiel, and asserts that needling of layer 12 would result in perforations having the claimed shape, i.e., a "tapered, three-dimensional structure protruding from the second side of the film."

Schiel describes the layer 12 in FIG. 4 as an "intermediary layer 12 between the base layer 1 and top bat layer 2." According to Schiel, at column 6, lines 24-33, "this intermediary layer 12 can be made of fibers or of foil. Although only three layers are shown in FIG. 4, there may be more layers contained in the felt structure for special requirements. For instance, the base 1 may be composed of two layers and the bat 2 of three or four layers that are made from finest fibers in the top layer and become coarser in the downward direction."

What is particularly significant is that, in the brief description of the drawings, the "intermediary layer" is described as a "bat" (col. 5, line 42). Moreover, in col. 6,

Application No.: 10/783107
Amendment dated: July 10, 2006
Reply to Office action of April 10, 2006

at line 26, Schiel says not that the intermediary layer 12 can be a bat or a foil, but rather that "the intermediary layer 12 *can be made of fibers or of foil.*" (emphasis supplied) According to Webster's Third New International Dictionary (1961), a bat (or batt) is "a continuous sheet of cotton or wool fiber prepared for carding or for layering in felt-making" or "a layer of felt as used in making hats." Although it is conceivable that a batt in a papermaking felt could be made of foil, since the term "batt" connotes a fibrous structure, in the case of a batt made of foil, the foil itself would be chopped or otherwise rendered into a form resembling the fibers of a conventional fiber bat. It follows that the intermediary layer described at col. 6, lines 24-33 is a bat made either of fibers or foil, and not a "non-oriented film. . . having openings, each opening being in the form of a tapered, three-dimensional, structure protruding from the second side of the film," as defined in claim 9. Neither Schiel, nor Schiel in combination with WO 03/029558, teach the concept of a felt having an anti-rewetting layer comprising a non-oriented film having tapered, protruding, three-dimensional openings, as defined in claim 9.

Rejection in paragraph 10 (\$103(a))

The rejection of dependent claims 11-12 in paragraph 10 is based on Schiel, WO 03/029558, and Gulya. This rejection should be withdrawn for the same reasons as advanced above in the remarks pertaining to the rejection in paragraph 9.

Application No.: 10/783107
Amendment dated: July 10, 2006
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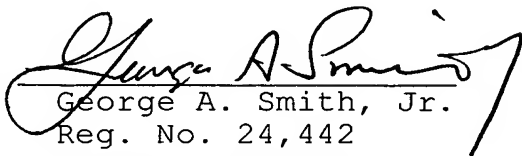
Rejection in paragraph 11 (§103(a))

The rejection of dependent claims 13-16 is based on Schiel, WO 03/029558, and Eklund. The same reasons as advanced above in the remarks pertaining to the rejection in paragraph 9 apply to this rejection. In addition, as the Examiner notes, neither Schiel nor WO 03/029558 teaches inclusion of both flat apertures and protuberances on a rewetting prevention layer. The Examiner refers to Eklund's col. 3, lines 39-56 for a teaching that the openings can have any configuration. However, for the reasons given above in response to the rejection in paragraphs 5-7, Eklund lacks three-dimensional openings, i.e., protuberances, and therefore does not teach combining flat openings with three-dimensional openings.

Conclusion

The applicants respectfully request reconsideration and allowance of this application. If the Examiner is of the opinion, after considering this response, that the application could be allowed but only if amended, it is requested that she contact the applicants' attorney for a personal or telephone interview.

Respectfully submitted,
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